**Geometry A SYLLABUS**



[www.clackamasmiddlecollege.org](http://www.clackamasmiddlecollege.org)

**Instructor Information**

**Instructor**: Ameena Amdahl-Mason

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**Office Hours**: 7:45-9:15am/2:45-3:45pm or by arrangement

**CLASS Information:**

**Course Description**: Geometry simplifies the presentation of basic Euclidean geometry.  Concepts of point, line and plane are basic to these courses.  Expansion of these concepts allows us to study angles, parallel lines, polygons, and circles.  The axiomatic approach to logical reasoning is stressed and problem-solving techniques are demonstrated.  Emphasis is placed on mastering state benchmarks. Work samples are an integral part of the course.  Course studies develop these properties through indirect reasoning, constructions, and transformations.  The concepts of area, perimeter and volume are redeveloped and coordinate geometry (graphing) is reviewed.

**Credits:** 0.5 credits per term

**Location**: CMC main campus; math room.

**Pre-requisites:** Algebra or consent of the instructor.

**Resources**:

Students have access to resources posted on the CMC website under the instructor’s page (<http://www.clackamasmiddlecollege.org/Teachers/AmeenaAmdahlMason/>) as well as on her wikispace (<http://ameena.wikispaces.com>). Included with the resources, students will also find:

* Current weekly grades posted
* Current assignments posted
* Other materials to be included as the course progresses

**Supplies**: Students are to bring a writing utensil every day along with a binder, notebook paper, and completed work from the previous day, handouts given out in class, and a calculator.

**TOPICS and STANDARDS:**

**Introduction to Geometry**

* H.1G.1 Identify, apply, and analyze angle relationships among two or more lines and a transversal to determine if lines are parallel, perpendicular, or neither.
* H.3G.4 Apply slope, distance, and midpoint formulas to solve problems in a coordinate plane.

**Lines, Angles, and Reasoning**

* H.1G.1 Identify, apply, and analyze angle relationships among two or more lines and a transversal to determine if lines are parallel, perpendicular, or neither.

**Triangle Properties**

* H.1G.2 Apply theorems, properties, and definitions to determine, identify, and justify congruency or similarity of triangles and to classify quadrilaterals
* H.1G.3 Apply theorems of corresponding parts of congruent and similar figures to determine missing sides and angles of polygons.
* H.1G.5 Determine if three given lengths form a triangle. If the given lengths form a triangle, classify it as acute, right, or obtuse.

**Polygon Properties**

* H.1G.4 Determine the missing dimensions, angles, or area of regular polygons, quadrilaterals, triangles, circles, composite shapes, and shaded regions.

**Circles**

* H.1G.7 In problems involving circles, apply theorems and properties of chords, tangents, and angles; and theorems and formulas of arcs and sectors.

**Transformations**

* H.3G.1 Recognize and identify line and rotational symmetry of two-dimensional figures.
* H.3G.2 Identify and perform single and composite transformations of geometric figures in a plane, including translations, origin-centered dilations, reflections across either axis or
* y = ±x, and rotations about the origin in multiples of 90°.

**RESPONSIBILITIES and Policies:**

**Student Responsibilities:** As a student of CMC, I expect you to adhere to the policies of the school, as outlined by the Student Handbook (located on the website). You are responsible for the assignments in this class and to communicate any questions, comments or concerns you have to me. Acceptable means of communication include an appointment, e-mail, voicemail or through online discussion forums/blogs. Use of correct grammar and punctuation is required in all written communications.

Plagiarism, cheating and collusion are prohibited at CMC. Students who fail to observe these standards are subject to disciplinary action. Please refer to the CMC Student Handbook for further definitions and consequences of these behaviors, available at: [www.clackamasmiddlecollege.org](http://www.clackamasmiddlecollege.org)

**Attendance:** Attending class daily will impact a student’s opportunity to learn in a positive manner and should result in mastery of skills, benchmarks and standards mentioned above.

**Class participation:** Class participation will result in a greater understanding of the subject matter and will help in skill development. This includes classroom or online discussions, group work, project or other participation requirements that impact student’s opportunity to learn.

**Use of Electronic Devices:** Cell phones, iPods and other relevant or irrelevant electronic devices are not to interfere with the learning environment unless these electronic devices are being used for a class assignment. The instructor reserves the right to take any devices that pose a problem. If a device is taken, then it will be returned in a timely fashion with a discussion about classroom expectations. If problem persists then disciplinary action may be taken.

**Other Policies:** Refer to the CMC Student Handbook

**Instructor Responsibilities:** As your instructor, I commit to communicating openly and frequently with you about this class. I will maintain a professional, safe learning environment adhering to the policies of CMC. You can expect a reply to communication, be it via e-mail, through online discussions, voicemail or in person, within 24-48 business hours.

**Syllabus Changes:** As your instructor, I retain the right to make changes based on the timeline of the class, feedback from learners and/or logistical issues and will inform you as soon as a change is made.

**Grading rubric:** For each topic, the mastery of standards noted above will be the basis for grading. Opportunities to master these standards will be in the form of daily work (individually or in groups), concept checks (quizzes), and unit tests and projects. The percentages for each will be:

Tests and Projects: 50%

Daily Work: 40%

Concept Checks: 10%

**Grading Scale:**

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| --- | --- |
| **Points Attained** | **Grade** |
| 90-100 | A |
| 80-89 | B |
| 70-79 | C |
| 60-69 | D |
| 50-59 | F |